What Is Claimed Is:

1. An electrical device having a generator, particularly for use in the vehicle electrical system of a motor vehicle, having a controller for controlling the generator voltage,
wherein areas for the controlling are provided in which a voltage control (area 30) is carried out and areas (31,32) in which a torque control is carried out.

2. The electrical device as recited in Claim 1,
wherein the transition between the areas (30,31,32) and/or the width of the areas (30,31,32) are a function of operating characteristics variables of the device.

3. The electrical device as recited in one of the preceding claims,
wherein the area (30) for the voltage control extends in a specifiable distance about the setpoint voltage (U_Soll).

4. The electrical device as recited in one of the preceding claims,
wherein the area (30) is a function of a specifiable torque (excess torque M_Überschuss).

5. The electrical device as recited in one of the preceding claims,
wherein the areas (31,32) for torque control extend on both sides of the area (30) for the voltage control.

6. The electrical device as recited in one of the preceding claims,
wherein the areas (31,32) for the torque control lie within a voltage range that is limited by the voltage boundary values (U_H, U_L).

7. The electrical device as recited in one of the preceding claims,
wherein the torque (M) is variable in an area (31,32) for the torque control according to a linear function.

8. The electrical device as recited in one of the preceding claims,
wherein the torque (M) is variable in an area (31,32) for the torque control according to a function F=F(T, P) that may be specified as desired, T being the time and P being an operating parameter of the device.

9. The electrical device as recited in one of the preceding claims,
wherein the torque (M) is variable in an area (31,32) for the torque control according to a functional dependence established in a characteristics map (K).

10. A method for the operation of an electrical device that includes a generator (12) having a controller (12B), especially in connection with a vehicle electrical system (13) of a motor vehicle,
wherein the voltage of the vehicle electrical system (13) and the generator voltage (U_Gen) is recorded; a check is made as to whether the recorded voltage lies in a specifiable area about the setpoint voltage (U_Soll); a voltage control is performed to the setpoint voltage (U_Soll) if the recorded voltage lies in the specifiable range about the setpoint voltage (U_Soll); a control of the torque (M) is carried out if the recorded voltage lies outside the specifiable range about the setpoint voltage, but still within a voltage range established by the voltage boundary values (U_H, U_L); and a highest priority for the voltage control is specified if the

recorded voltage lies outside the voltage range limited by the voltage boundary values (U_H, U_L).

11. The method as recited in Claim 10, wherein, in the control of the torque (M), the torque is changed according to a linear function.

12. The method as recited in Claim 10, wherein, in the control of the torque (M), the torque is changed according to a desired function F=F(T, P), where T is the time and P is a specifiable operating parameter of the device.

13. The method as recited in Claim 10, wherein, in the control of the torque (M), the torque is changed according to a functional dependence established in a characteristics map (K).

14. The method as recited in one of Claims 10 through 13, wherein the width of the areas (30, 31,32), in which a voltage control or a torque control is carried out and/or the transition locations between these named areas, are fixedly specified during the application of the device.

15. The method as recited in one of Claims 10 through 13, wherein the width of the areas (30, 31,32) in which a voltage control or a torque control is carried out and/or the transition locations between these named areas are adjusted to the operating parameters of the device during the driving operation of the vehicle equipped with the device.